

In the Claims

1. A transaction system supporting transactions involving at least one fungible, ephemeral commodity, comprising:

a computer communicatively coupled to a certified client, and accessibly coupled to a computer memory, and controlled by a program system comprised of program steps residing in said memory of:

said certified client initiating at least one action in said transaction system; and further comprising at least two members of the basic usage program collection comprising program steps of:

managing at least one user resources;

managing a bilateral trading portfolio comprising at least one bilateral trade in at least one of said fungible, ephemeral commodities;

managing a market position portfolio comprising market positions of at least one of said fungible, ephemeral commodities;

managing a market trading collection comprising at least one market trade in at least one of said fungible, ephemeral commodities;

managing a credit resource collection comprising at least one credit resource; and

managing compliance reporting based upon at least one member of the collection comprising said user resources, said market position portfolio, said bilateral trading portfolio and said market trading collection;

wherein the program step of said certified client initiating said action in said transaction system is further comprised of at least one member of the collection comprising the program steps of:

initiating a bid for a market interval at a bid price and a bid amount as a first validated order;

initiating an ask for a market interval at a ask price and a ask amount as a second validated order;

5        responding to a financial commitment presented by said transaction system to create a financial response to said financial commitment;

reporting at least one of said bilateral trades to said transaction system; and

10        confirming at least one of said bilateral trades to said transaction system;

wherein said market interval includes a product type associated with at least one of said fungible, ephemeral commodities for at least one location for at least one time interval; and

15        wherein the program step of said certified client responding to said financial commitment presented by said transaction system is further comprised of at least one member of the collection comprising the program steps of

creating a financial payment of said financial commitment in said transaction system; and

20        creating a financial counter-response to said financial commitment in said transaction system.

2.        The system of Claim 1,

25        wherein the program step of managing said user resource further comprises at least one member of the collection comprising the program steps of:

managing a generator of at least one of said fungible, ephemeral commodities;

managing a load consuming at least one of said fungible, ephemeral commodities;

managing a transmission facility for at least one of said fungible, ephemeral commodities;

managing an import providing at least one of said fungible, ephemeral commodities; and

managing an export consuming at least one of said fungible, ephemeral commodities.

3. The system of Claim 2,

wherein the program step managing said user resource is further comprised of the program step of:

creating a first knowledge interval of said ephemeral, fungible commodity at a first time interval containing a first cost in said knowledge interval collection; and further comprised of at least one member of the collection comprising the program steps of:

maintaining a bid interval collection of bid intervals of said ephemeral, fungible commodity, each comprised of a bid price, a bid amount, and a bid time interval; and

maintaining an ask interval collection of ask intervals of said ephemeral, fungible commodity, each comprised of a ask price, a ask amount, and a ask time interval;

wherein the program step creating said first knowledge interval is comprised of the program steps of:

receiving a knowledge interval creation message to create a received knowledge interval creation message; and

creating said first knowledge interval of said ephemeral, fungible commodity at said first time interval containing said first cost in said knowledge interval collection based upon said received knowledge interval creation message.

4. The system of Claim 3,

wherein the program step managing said user resource is further comprised of the program steps of:

determining said ephemeral, fungible commodity needs over a planning time interval; and

determining an equipment usage plan based upon said knowledge interval collection containing an equipment usage item of said user resource comprised of an activation time and an action belonging to an action collection comprising start-action, stop-action and throttle-action to create a resource operating schedule; and

operating said equipment usage item of said user resource based upon said device operating schedule.

5. The system of Claim 4,

wherein the program step managing said user resource is further comprised of the program step of:

examining an equipment usage collection comprised of equipment usage entries each containing a delivery time and a need schedule for said

ephemeral, fungible commodity to create said ephemeral, fungible commodity needs over said planning time interval comprises an amount.

6. The system of Claim 5,

wherein said ephemeral, fungible commodity needs over said planning time interval further comprises a cost limit; and

wherein the program step initiating said bid is further comprised of the program step of:

making said bid of a first bid amount at a first bid price within said cost limit for said first time interval of said ephemeral, fungible commodity.

7. The system of Claim 4,

wherein the program step operating said equipment usage item based upon said device operating schedule is further comprised of at least one

member of the collection comprising the program steps of

starting said equipment usage item of said user resource;

stopping said equipment usage item of said user resource; and

throttling said equipment usage item of said user resource.

8. The system of Claim 1,

wherein the program step of managing said market position portfolio is comprised of the program steps of:

maintaining a market window;

maintaining a local market position portfolio comprised of at least one

market position summary, each of said market position summaries including a

market interval of said fungible, ephemeral commodity within said market window;

presenting said local market position portfolio based upon said market window;

wherein the program step of presenting said local market position portfolio is further comprised of:

presenting at least one of said market position summaries including said market interval within said market window.

9. The system of Claim 8,

wherein at least one of said market position summaries of said local market position portfolio is further comprised of an amount-held, a current bid summary, a current ask summary, a current market price and a current order summary;

wherein the program step of presenting said market position summary further comprising the program steps of:

presenting said included market interval;

presenting said amount-held;

presenting said current bid summary;

presenting said current ask summary;

presenting said current market price; and

presenting said current order summary.

10. The system of Claim 9,

the program system further comprising the program step of maintaining a market position database including the program step of:

maintaining at least one of said market positions containing at least one of said market intervals further including at least one member of the collection comprising the program steps of:

maintaining an amount-held associated with said market interval;

maintaining a current bid list associated with said market interval including at least one current bid;

maintaining a current ask list associated with said market interval including at least one ask;

maintaining a current market price associated with said market interval; and

maintaining a current order list associated with said market interval.

11. The system of Claim 10,

wherein the program system further comprises the program step of:

establishing a client node belonging to said node collection of said AC power network as said business location; and

wherein the program step of maintaining said local market position portfolio is further comprised of at least one member of a calculation collection comprising the program steps of:

calculating said current bid summary from said market position database based upon said business location;

calculating said current ask summary from said market position database based upon said business location; and

calculating said current market price from said market position database based upon said business location.

12. The system of Claim 11,

wherein at least one of said market intervals contains an AC power transfer product type as said fungible, ephemeral commodity and contains said location as a first of said nodes directed to a second of said nodes of said AC power network node collection.

13. The system of Claim 12,

wherein the program system further comprises the program step of:

maintaining a flowgate collection containing at least two flowgate entries;

wherein each of said flowgate entries contained in said flowgate collection includes a factor, a from-node of said node collection and a to-node of said node collection;

wherein for each of said flowgate entries contained in said flowgate collection, at least one of said market intervals contains said AC power transfer product type as said fungible, ephemeral commodity and said location coinciding with said flowgate entry; and

wherein at least one member of said calculation collection is further based upon said flowgate collection.

14. The system of Claim 13,

wherein said product type is further comprised of an AC power transfer point-to-point product type as said fungible, ephemeral commodity.



wherein the program step maintaining said current bid list is further comprised of the program steps of:

receiving a request for a point-to-point bid associated with said market interval to create a received point-to-point bid request;

generating a point-to-point bid associated with said market interval based upon said received bid request to create a new point-to-point bid associated with said market interval further including the program steps of:

generating a bid associated with said market interval containing said AC power transfer product type and said location coinciding with said flowgate entry, for at least one flowgate entry contained in said flowgate collection; and

sending said new point-to-point bid associated with said market interval based upon said received bid request as an order message.

16. The system of Claim 8,

wherein said market trade is associated with at least one of said market intervals of said fungible, ephemeral commodity by said certified client with a member of the trade specification collection;

wherein said trade specification collection is comprised of

a bid specification containing an amount, and a price;

an ask specification containing said amount, and said price; and

an contract specification containing said amount and said price:

wherein the program step managing said market trade collection is

further comprised of the program step of

presenting said market trade, for at least one of said market trades,  
further comprised of the program steps of

presenting said market interval;

identifying said member of said trade specification collection;

presenting said amount; and

presenting said price.

17. The system of Claim 1,

wherein the program step of managing said bilateral trading portfolio is

further comprised of the program steps of:

managing said bilateral trade, for each of said bilateral trades of said  
bilateral trading portfolio.

18. The system of Claim 1,

wherein the program step of managing said bilateral trading portfolio is  
further comprised of the program steps of:

receiving an authenticated bilateral trade notification message to create  
a received bilateral trade notification message;

updating said bilateral trading portfolio based upon said received  
bilateral trade notification message;

generating an initial bilateral trade;

processing said initial bilateral trade to create an initial bilateral trade  
message;

inserting said initial bilateral trade into said bilateral trading portfolio;

sending said initial bilateral trade message;

receiving a bilateral trade confirmation message to create a received  
bilateral trade confirmation request; and

inserting said received bilateral trade confirmation request into said  
bilateral trading portfolio.

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19. The system of Claim 18,

wherein the program step of managing said bilateral trading portfolio is  
further comprised of the program steps of:

responding to said received bilateral trade confirmation request to  
10 create a bilateral trade confirmation response;

inserting said bilateral trade confirmation response into said bilateral  
trading portfolio;

processing said bilateral trade confirmation response to create a  
bilateral trade confirmation response message; and

15 sending said bilateral trade confirmation response message.

20. The system of Claim 1,

wherein the program step of managing said credit resource collection is  
comprised of the program steps of:

20 managing said credit resource, for each of said credit resources of said  
credit resource collection.

21. The system of Claim 20,

25 wherein the program step of managing said credit resource, for at  
least one of said credit resources of said credit resource collection, is further  
comprised of the program steps of:

receiving a credit resource message from said transaction system to  
create a received credit resource message;

updating said credit resource based upon said received credit resource  
message;

5       presenting said credit resource;

preparing a credit resource request message; and

sending said credit resource request message to create a sent credit  
request.

10   22. The system of Claim 21,

wherein the program step of receiving said credit resource message is  
further comprised of the program step of:

receiving a credit request response message from said transaction  
system based upon said sent credit request to create a received credit  
15   request response.

23. The system of Claim 1,

wherein the program step of managing said user resource, is further  
comprised of the program steps of:

20       receiving a user resource schedule including a time interval from said  
transaction system to create a received schedule for said time interval;

updating an operating schedule for said user resource based upon said  
received schedule for said time interval to create said operating schedule  
containing an operating schedule entry for said time interval;

25       maintaining a real-time; and

controlling said user resource based upon said operating schedule for said user resource and based upon said real-time.

24. The system of Claim 23,

wherein said operating schedule entry for said time interval contained in said operating schedule for said user resource includes a capacity option item; and

wherein the program step of managing said user resource is further comprised of the program steps of:

sending a capacity option exercise message for said time interval based said capacity option item to create a sent capacity option exercise; and

updating said operating schedule entry for said time interval based upon said sent capacity option exercise.

25. The system of Claim 24,

wherein the program step of managing said user resource is further comprised of the program steps of:

receiving a capacity exercise acknowledgment based upon said sent capacity option exercise to create a received capacity exercise acknowledgment; and

updating said operating schedule entry for said time interval based upon said received capacity exercise acknowledgment.

26. The system of Claim 25,

wherein said sent capacity option exercise includes an exercise amount;

wherein said received capacity exercise acknowledgment includes an acknowledgment amount;

wherein the program step of managing said user resource is further comprised of the program steps of:

determining if said exercise amount is greater than said acknowledgment amount, and

reporting a shortfall of said exercise amount minus said acknowledgment amount whenever said exercise amount is greater than said acknowledgment amount.

27. The system of Claim 1,

wherein said program system supports said certified client acoustically communicating with said computer to interactively use said transaction system.

28. The system of Claim 1, further comprising

a client computer communicatively coupled to a server computer included in a server system;

wherein said certified client operates said client computer to interactively use said transaction system.

29. The system of Claim 28,

wherein said server system provides a market engine supporting a virtual trading floor involving said fungible, ephemeral commodities.

30. The system of Claim 29,

wherein said server system further comprises an engine system supporting said virtual trading floor involving said fungible, ephemeral commodities.

31. A method for a certified client interactively using a transaction system supporting transactions involving at least one fungible, ephemeral commodity, comprising the step of:

said certified client initiating at least one action in said transaction system;

and further comprising at least two members of the basic usage collection comprising the steps of:

managing at least one user resource;

managing a bilateral trading portfolio comprising at least one bilateral trade in at least one of said fungible, ephemeral commodities;

managing a market position portfolio comprising at least one market position of at least one of said fungible, ephemeral commodities;

managing a market trading collection comprising at least one market trade in at least one of said fungible, ephemeral commodities;

managing a credit resource collection comprising at least one credit resource; and

managing compliance reporting based upon at least one member of the collection comprising said user resources, said market position portfolio, said bilateral trading portfolio and said market trading collection;

wherein the step of said certified client initiating said action in said transaction system is further comprised of at least one member of the collection comprising the steps of:

initiating a bid for a market interval at a bid price and a bid amount as a first validated order;

initiating an ask for a market interval at a ask price and a ask amount as a second validated order;

5        responding to a financial commitment presented by said transaction system to create a financial response to said financial commitment;

reporting at least one of said bilateral trades to said transaction system; and

confirming at least one of said bilateral trades to said transaction system;

10        wherein said market interval includes a product type associated with at least one of said fungible, ephemeral commodities for at least one location for at least one time interval; and

wherein the step of responding to said financial commitment presented by said transaction system is further comprised of at least one member of the collection comprising the steps of

creating a financial payment of said financial commitment; and

creating a financial counter-response to said financial commitment.

20        32. The method of Claim 31,

wherein the step of managing said user resource further comprises at least one member of the collection comprising the steps of:

managing a generator of at least one of said fungible, ephemeral commodities;

25        managing a load consuming at least one of said fungible, ephemeral commodities;



managing a transmission facility for at least one of said fungible, ephemeral commodities;

managing an import providing at least one of said fungible, ephemeral commodities; and

managing an export consuming at least one of said fungible, ephemeral commodities.

33. The method of Claim 32,

wherein the step managing said user resource is further comprised of the step of:

creating a first knowledge interval of said ephemeral, fungible commodity at a first time interval containing a first cost in said knowledge interval collection;

wherein the step managing said user resource is further comprised of at least one member of the collection comprising the steps of:

maintaining a bid interval collection of bid intervals of said ephemeral, fungible commodity, each comprised of a bid price, a bid amount, and a bid time interval; and

maintaining an ask interval collection of ask intervals of said ephemeral, fungible commodity, each comprised of a ask price, a ask amount, and a ask time interval;

wherein the step creating said first knowledge interval is comprised of the steps of:

receiving a knowledge interval creation message to create a received knowledge interval creation message; and

creating said first knowledge interval of said ephemeral, fungible commodity at said first time interval containing said first cost in said knowledge interval collection based upon said received knowledge interval creation message.

34. The method of Claim 33,

wherein the step managing said user resource is further comprised of the steps of:

determining said ephemeral, fungible commodity needs over a planning time interval; and

determining an equipment usage plan based upon said knowledge interval collection containing an equipment usage item of said user resource comprised of an activation time and an action belonging to an action collection comprising start-action, stop-action and throttle-action to create a resource operating schedule; and

operating said equipment usage item of said user resource based upon said device operating schedule.

35. The method of Claim 34,

wherein the step managing said user resource is further comprised of the step of:

examining an equipment usage collection comprised of equipment usage entries each containing a delivery time and a need schedule for said ephemeral, fungible commodity to create said ephemeral, fungible commodity needs over said planning time interval comprises an amount.

36. The method of Claim 35,  
wherein said ephemeral, fungible commodity needs over said planning  
time interval further comprises a cost limit; and  
wherein the step initiating said bid is further comprised of the step of:  
5 making said bid of a first bid amount at a first bid price within said cost  
limit for said first time interval of said ephemeral, fungible commodity.

37. The method of Claim 34,  
wherein the step operating said equipment usage item based upon  
10 said device operating schedule is further comprised of at least one member of  
the collection comprising the steps of  
starting said equipment usage item of said user resource;  
stopping said equipment usage item of said user resource; and  
throttling said equipment usage item of said user resource.

38. The method of Claim 31,  
wherein the step of managing said market position portfolio is  
comprised of the steps of:  
maintaining a market window;  
20 maintaining a local market position portfolio comprised of at least one  
market position summary, each of said market position summaries including a  
market interval of said fungible, ephemeral commodity within said market  
window;  
presenting said local market position portfolio based upon said market  
25 window;

wherein the step of presenting said local market position portfolio is further comprised of

presenting at least one of said market position summaries including said market interval within said market window.

39. The method of Claim 38,

wherein at least one of said market position summaries of said local market position portfolio is further comprised of an amount-held, a current bid summary, a current ask summary, a current market price and a current order summary;

wherein the step of presenting said market position summary further comprising the steps of

presenting said included market interval;

presenting said amount-held;

presenting said current bid summary;

presenting said current ask summary;

presenting said current market price; and

presenting said current order summary.

40. The method of Claim 39, further comprising the step of:  
maintaining a market position database including the step of

maintaining at least one of said market positions containing at least one of said market intervals further including at least one member of the collection comprising the steps of

maintaining an amount-held associated with said market interval;

maintaining a current bid list associated with said market interval including at least one current bid;

maintaining a current ask list associated with said market interval including at least one ask;

maintaining a current market price associated with said market interval; and

maintaining a current order list associated with said market interval.

41. The method of Claim 40, further comprising the step of:

establishing a client node belonging to said node collection of said AC power network as said business location; and

wherein the step maintaining said local market position portfolio is further comprised of at least one member of a calculation collection

comprising the steps of:

calculating said current bid summary from said market position database based upon said business location;

calculating said current ask summary from said market position database based upon said business location; and

calculating said current market price from said market position database based upon said business location.

42. The method of Claim 41,

wherein at least one of said market intervals contains an AC power

transfer product type as said fungible, ephemeral commodity and contains

said location as a first of said nodes directed to a second of said nodes of said AC power network node collection.

43. The method of Claim 42, further comprising the step of:

maintaining a flowgate collection containing at least two flowgate entries;

wherein each of said flowgate entries contained in said flowgate collection includes a factor, a from-node of said node collection and a to-node of said node collection;

wherein for each of said flowgate entries contained in said flowgate collection, at least one of said market intervals contains said AC power transfer product type as said fungible, ephemeral commodity and said location coinciding with said flowgate entry; and

wherein at least one member of said calculation collection is further based upon said flowgate collection.

44. The method of Claim 43,

wherein said product type is further comprised of an AC power transfer point-to-point product type as said fungible, ephemeral commodity.

45. The method of Claim 44,

wherein the step maintaining said current bid list is further comprised of the steps of:

receiving a request for a point-to-point bid associated with said market interval to create a received point-to-point bid request;

generating a point-to-point bid associated with said market interval based upon said received bid request to create a new point-to-point bid associated with said market interval further including the steps of:

generating a bid associated with said market interval containing said AC power transfer product type and said location coinciding with said flowgate entry, for at least one flowgate entry contained in said flowgate collection; and

sending said new point-to-point bid associated with said market interval based upon said received bid request as an order message.

46. The method of Claim 38,

wherein said market trade is associated with at least one of said market intervals of said fungible, ephemeral commodity by said certified client with a member of the trade specification collection;

wherein said trade specification collection is comprised of

a bid specification containing an amount, and a price;

an ask specification containing said amount, and said price; and

an order specification containing said amount and said price;

wherein the step managing said market trade collection is further comprised of the step of

presenting said market trade, for at least one of said market trades, further comprised of the steps of

presenting said market interval;

identifying said member of said trade specification collection;

presenting said amount; and

presenting said price.

47. The method of Claim 31,

wherein the step of managing said bilateral trading portfolio is further comprised of the steps of:

managing said bilateral trade, for each of said bilateral trades of said  
5 bilateral trading portfolio.

48. The method of Claim 31,

wherein the step of managing said bilateral trading portfolio is further comprised of the steps of:

10 receiving an authenticated bilateral trade notification message to create a received bilateral trade notification message;

updating said bilateral trading portfolio based upon said received bilateral trade notification message;

generating an initial bilateral trade;

15 processing said initial bilateral trade to create an initial bilateral trade message;

inserting said initial bilateral trade into said bilateral trading portfolio;

sending said initial bilateral trade message;

20 receiving a bilateral trade confirmation message to create a received bilateral trade confirmation request; and

inserting said received bilateral trade confirmation request into said bilateral trading portfolio.

49. The method of Claim 48,

25 wherein the step of managing said bilateral trading portfolio is further comprised of the steps of:



responding to said received bilateral trade confirmation request to  
create a bilateral trade confirmation response;

inserting said bilateral trade confirmation response into said bilateral  
trading portfolio;

5 processing said bilateral trade confirmation response to create a  
bilateral trade confirmation response message; and

sending said bilateral trade confirmation response message.

50. The method of Claim 31,

10 wherein the step of managing said credit resource collection is  
comprised of the steps of:

managing said credit resource, for each of said credit resources of said  
credit resource collection.

15 51. The method of Claim 50,

wherein the step of managing said credit resource, for at least one of  
said credit resources of said credit resource collection, is further comprised of  
the steps of:

20 receiving a credit resource message to create a received credit  
resource message;

updating said credit resource based upon said received credit resource  
message;

presenting said credit resource;

preparing a credit resource request message; and

25 sending said credit resource request message to create a sent credit  
request.

52. The method of Claim 51,

wherein the step of receiving said credit resource message is further comprised of the step of:

5 receiving a credit request response message based upon said sent credit request to create a received credit request response.

53. The method of Claim 31,

10 wherein the step of managing said user resource, is further comprised of the steps of:

receiving a user resource schedule including a time interval to create a received schedule for said time interval;

updating an operating schedule for said user resource based upon said received schedule for said time interval to create said operating schedule

15 containing an operating schedule entry for said time interval;

maintaining a real-time; and

controlling said user resource based upon said operating schedule for said user resource and based upon said real-time.

20 54. The method of Claim 53,

wherein said operating schedule entry for said time interval contained in said operating schedule for said user resource includes a capacity option item; and

25 wherein the step of managing said user resource is further comprised of the steps of:

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5 sending a capacity option exercise message for said time interval based said capacity option item to create a sent capacity option exercise; and updating said operating schedule entry for said time interval based upon said sent capacity option exercise.

55. The method of Claim 54,

wherein the step of managing said user resource is further comprised of the steps of:

10 receiving a capacity exercise acknowledgment based upon said sent capacity option exercise to create a received capacity exercise acknowledgment; and

updating said operating schedule entry for said time interval based upon said received capacity exercise acknowledgment.

15 56. The method of Claim 55,

wherein said sent capacity option exercise includes an exercise amount;

wherein said received capacity exercise acknowledgment includes an acknowledgment amount;

20 wherein the step of managing said user resource is further comprised of the steps of:

determining if said exercise amount is greater than said acknowledgment amount, and

25 reporting a shortfall of said exercise amount minus said acknowledgment amount whenever said exercise amount is greater than said acknowledgment amount.

57. The method of Claim 31,

wherein said certified client acoustically communicates with said transaction system to interactively use said transaction system.

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58. The method of Claim 31,

wherein said transaction system is comprised of a client computer communicatively coupled to a server computer included in a server system;

wherein said certified client operates said client computer to interactively use said transaction system.

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59. The method of Claim 58,

wherein said server system provides a market engine supporting a virtual trading floor involving at least one of said fungible, ephemeral commodities.

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60. The method of Claim 59,

wherein said server system further comprises an engine system supporting said virtual trading floor involving said fungible, ephemeral commodities.

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61. The method of Claim 58,

wherein said client computer is controlled by a program system containing program steps residing in a memory accessibly coupled to said client computer;

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wherein said program system is comprised of at least two members each implementing a member of said basic usage collection.

62. The method of Claim 31,

wherein said financial commitment in said transaction system is further comprised of a first financial obligation to a first party;

wherein the step of said certified client responding to said financial commitment is further comprised of the step of

said certified client responding to said first financial obligation to said first party to create a first financial payment to said first party.

63. The first financial payment to said first party as a product of the process of Claim 62.

64. A transaction system for supporting transactions involving at least one fungible, ephemeral commodity, comprising:

a means for using said transaction system communicatively coupled to a certified client comprising

a means for said certified client initiating at least one action in said transaction system; and further comprised of at least two members of the basic usage means collection comprising of:

a means for managing at least one user resources;

a means for managing a bilateral trading portfolio comprising at least one bilateral trade in at least one of said fungible, ephemeral commodities;

a means for managing a market position portfolio comprising market positions of at least one of said fungible, ephemeral commodities;

a means for managing a market trading collection comprising at least one market trade in at least one of said fungible, ephemeral commodities;

a means for managing a credit resource collection comprising at least one credit resource; and

5 a means for managing compliance reporting based upon at least one member of the collection comprising said user resources, said market position portfolio, said bilateral trading portfolio and said market trading collection;

wherein said means for said certified client initiating said action in said transaction system is further comprised of at least one member of the  
10 collection comprising:

a means for initiating a bid for a market interval at a bid price and a bid amount as a first validated order;

a means for a first ask for a market interval at a ask price and a ask amount as a second validated order;

15 a means for responding to a financial commitment presented by said transaction system to create a financial response to said financial commitment;

a means for reporting at least one of said bilateral trades to said transaction system; and

20 a means for confirming at least one of said bilateral trades to said transaction system;

wherein said market interval includes a product type associated with at least one of said fungible, ephemeral commodities for at least one location for at least one time interval; and

wherein said means for responding to said financial commitment presented by said transaction system is further comprised of at least one member of the collection comprising

a means for creating a financial payment of said financial commitment;

and

a means for said certified client creating a financial counter-response to said financial commitment.

65. The system of Claim 64,

wherein said means for managing said user resource further comprises at least one member of the collection comprising:

a means for managing a generator of at least one of said fungible, ephemeral commodities;

a means for managing a load consuming at least one of said fungible, ephemeral commodities;

a means for managing a transmission facility for at least one of said fungible, ephemeral commodities;

a means for managing an import providing at least one of said fungible, ephemeral commodities; and

a means for managing an export consuming at least one of said fungible, ephemeral commodities.

66. The system of Claim 65,

wherein said means for managing said user resource is further comprised of:

a means for creating a first knowledge interval of said ephemeral, fungible commodity at a first time interval containing a first cost in said knowledge interval collection;

wherein said means for managing said user resource is further comprised of at least one member of the collection comprising:

a means for maintaining a bid interval collection of bid intervals of said ephemeral, fungible commodity, each comprised of a bid price, a bid amount, and a bid time interval; and

a means for maintaining an ask interval collection of ask intervals of said ephemeral, fungible commodity, each comprised of a ask price, a ask amount, and a ask time interval;

wherein said means for creating said first knowledge interval is comprised of:

a means for receiving a knowledge interval creation message to create a received knowledge interval creation message; and

a means for creating said first knowledge interval of said ephemeral, fungible commodity at said first time interval containing said first cost in said knowledge interval collection based upon said received knowledge interval creation message.

67. The system of Claim 66,

wherein said means for managing said user resource is further comprised of:

a means for determining said ephemeral, fungible commodity needs over a planning time interval; and



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5 a means for determining an equipment usage plan based upon said knowledge interval collection containing an equipment usage item of said user resource comprised of an activation time and an action belonging to an action collection comprising start-action, stop-action and throttle-action to create a resource operating schedule; and

a means for operating said equipment usage item of said user resource based upon said device operating schedule.

68. The system of Claim of 67,

10 wherein said means for managing said user resource is further comprised of:

15 a means for examining an equipment usage collection comprised of equipment usage entries each containing a delivery time and a need schedule for said ephemeral, fungible commodity to create said ephemeral, fungible commodity needs over said planning time interval comprises an amount.

69. The system of Claim of 68,

wherein said ephemeral, fungible commodity needs over said planning time interval further comprises a cost limit; and

20 wherein said means for initiating said bid is further comprised of:

a means for making said bid of a first bid amount at a first bid price within said cost limit for said first time interval of said ephemeral, fungible commodity.

25 70. The system of Claim 67,

wherein said means for operating said equipment usage item based upon said device operating schedule is further comprised of at least one member of the collection comprising

a means for starting said equipment usage item of said user resource;

5 a means for stopping said equipment usage item of said user resource;  
and

a means for throttling said equipment usage item of said user resource.

71. The system of Claim 64,

10 wherein said means for managing said market position portfolio is comprised of:

a means for maintaining a market window;

a means for maintaining a local market position portfolio comprised of at least one market position summary, each of said market position  
15 summaries including a market interval of said fungible, ephemeral commodity within said market window;

a means for presenting said local market position portfolio based upon said market window;

20 wherein said means for presenting said local market position portfolio is further comprised of:

a means for presenting at least one of said market position summaries including said market interval within said market window.

72. The system of Claim 71,

25 wherein at least one of said market position summaries of said local market position portfolio is further comprised of an amount-held, a current bid

summary, a current ask summary, a current market price and a current order summary;

wherein said means for presenting said market position summary further comprising:

- 5 a means for presenting said included market interval;
- a means for presenting said amount-held;
- a means for presenting said current bid summary;
- a means for presenting said current ask summary;
- a means for presenting said current market price; and
- 10 a means for presenting said current order summary.

73. The system of Claim 72, further comprising

a means for maintaining a market position database including:

- a means for maintaining at least one of said market positions
- 15 containing at least one of said market intervals further including at least one member of the collection comprising:

- a means for maintaining an amount-held associated with said market interval;

- a means for maintaining a current bid list associated with
- 20 said market interval including at least one current bid;

- a means for maintaining a current ask list associated with said market interval including at least one ask;

- a means for maintaining a current market price associated with said market interval; and

- 25 a means for maintaining a current order list associated with said market interval.

74. The system of Claim 73, further comprising:

a means for establishing a client node belonging to said node collection of said AC power network as said business location; and

wherein said means for maintaining said local market position portfolio is further comprised of at least one member of a calculation collection comprising:

a means for calculating said current bid summary from said market position database based upon said business location;

a means for calculating said current ask summary from said market position database based upon said business location; and

a means for calculating said current market price from said market position database based upon said business location.

75. The system of Claim 74,

wherein at least one of said market intervals contains an AC power transfer product type as said fungible, ephemeral commodity and contains said location as a first of said nodes directed to a second of said nodes of said AC power network node collection.

76. The system of Claim 75, further comprising:

a means for maintaining a flowgate collection containing at least two flowgate entries;

wherein each of said flowgate entries contained in said flowgate collection includes a factor, a from-node of said node collection and a to-node of said node collection;

wherein for each of said flowgate entries contained in said flowgate collection, at least one of said market intervals contains said AC power transfer product type as said fungible, ephemeral commodity and said location coinciding with said flowgate entry; and

wherein at least one member of said calculation collection is further based upon said flowgate collection.

77. The system of Claim 76,

wherein said product type is further comprised of an AC power transfer point-to-point product type as said fungible, ephemeral commodity.

78. The system of Claim 77,

wherein said means for maintaining said current bid list is further comprised of:

a means for receiving a request for a point-to-point bid associated with said market interval to create a received point-to-point bid request;

a means for generating a point-to-point bid associated with said market interval based upon said received bid request to create a new point-to-point bid associated with said market interval further including:

a means for generating a bid associated with said market interval containing said AC power transfer product type and said location coinciding with said flowgate entry, for at least one flowgate entry contained in said flowgate collection; and

a means for sending said new point-to-point bid associated with said market interval based upon said received bid request as an order message.

79. The system of Claim 71,

wherein said market trade is associated with at least one of said market intervals of said fungible, ephemeral commodity by said certified client with a member of the trade specification collection;

wherein said trade specification collection is comprised of

a bid specification containing an amount, and a price;

an ask specification containing said amount, and said price; and

an order specification containing said amount and said price;

wherein said means for managing said market trade collection is

further comprised of

a means for presenting said market trade, for at least one of said market trades, further comprised of

a means for presenting said market interval;

a means for identifying said member of said trade specification

collection;

a means for presenting said amount; and

a means for presenting said price.

80. The system of Claim 64,

wherein said means for managing said bilateral trading portfolio is further comprised of:

a means for managing said bilateral trade, for each of said bilateral trades of said bilateral trading portfolio.

81. The system of Claim 64,

wherein said means for managing said bilateral trading portfolio is further comprised of:

a means for receiving an authenticated bilateral trade notification message to create a received bilateral trade notification message; and

a means for updating said bilateral trading portfolio based upon said received bilateral trade notification message;

a means for generating an initial bilateral trade;

a means for processing said initial bilateral trade to create an initial bilateral trade message;

a means for inserting said initial bilateral trade into said bilateral trading portfolio; and

a means for sending said initial bilateral trade message;

a means for receiving a bilateral trade confirmation message to create a received bilateral trade confirmation request; and

a means for inserting said received bilateral trade confirmation request into said bilateral trading portfolio.

82. The system of Claim 81,

wherein said means for managing said bilateral trading portfolio is further comprised of:

a means for responding to said received bilateral trade confirmation request to create a bilateral trade confirmation response;

a means for inserting said bilateral trade confirmation response into said bilateral trading portfolio;

a means for processing said bilateral trade confirmation response to create a bilateral trade confirmation response message; and

a means for sending said bilateral trade confirmation response message.

83. The system of Claim 64,

wherein said means for managing said credit resource collection is comprised of:

a means for managing said credit resource, for each of said credit resources of said credit resource collection.

84. The system of Claim 83,

wherein said means for managing said credit resource, for at least one of said credit resources of said credit resource collection, is further comprised of:

a means for receiving a credit resource message from said transaction system to create a received credit resource message;

a means for updating said credit resource based upon said received credit resource message;

a means for presenting said credit resource;

a means for preparing a credit resource request message; and

a means for sending said credit resource request message to create a sent credit request.

85. The system of Claim 84,

wherein said means for receiving said credit resource message is further comprised of:



a means for receiving a credit request response message from said transaction system based upon said sent credit request to create a received credit request response.

86. The system of Claim 64,

wherein said means for managing said user resource, is further comprised of:

a means for receiving a user resource schedule including a time interval from said transaction system to create a received schedule for said time interval;

a means for updating an operating schedule for said user resource based upon said received schedule for said time interval to create said operating schedule containing an operating schedule entry for said time interval;

a means for maintaining a real-time; and

a means for controlling said user resource based upon said operating schedule for said user resource and based upon said real-time.

87. The system of Claim 86,

wherein said operating schedule entry for said time interval contained in said operating schedule for said user resource includes a capacity option item; and

wherein said means for managing said user resource is further comprised of:

a means for sending a capacity option exercise message for said time interval based said capacity option item to create a sent capacity option exercise; and

a means for updating said operating schedule entry for said time interval based upon said sent capacity option exercise.

88. The system of Claim 87,

wherein said means for managing said user resource is further comprised of:

a means for receiving a capacity exercise acknowledgment based upon said sent capacity option exercise to create a received capacity exercise acknowledgment; and

a means for updating said operating schedule entry for said time interval based upon said received capacity exercise acknowledgment.

89. The system of Claim 88,

wherein said sent capacity option exercise includes an exercise amount;

wherein said received capacity exercise acknowledgment includes an acknowledgment amount;

wherein said means for managing said user resource is further comprised of:

a means for determining if said exercise amount is greater than said acknowledgment amount; and

a means for reporting a shortfall of said exercise amount minus said acknowledgment amount whenever said exercise amount is greater than said acknowledgment amount.

90. The system of Claim 64,

wherein said means for using said transaction system supports at least one member of the collection comprising:

said certified client acoustically communicating with said transaction system to interactively use said transaction system;

said certified client communicating in a tactile fashion with said transaction system to interactively use said transaction system;

said certified client communicating in a wireless fashion with said transaction system to interactively use said transaction system; and

said certified client communicating in a wireline fashion with said transaction system to interactively use said transaction system.

91. The system of Claim 64,

wherein said transaction system is further comprised of at least one computer operated by said certified client and controlled by a program system comprised of program steps residing in a memory accessibly coupled to said computer.

92. The system of Claim 91,

wherein said means for using said transaction system is implemented as at least one of said program steps in said program system.

93. The system of Claim 91,  
wherein at least one member of said basic usage means collection is  
implemented as at least one of said program steps in said program system.

94. The system of Claim 64,  
wherein said transaction system is further comprised of a client  
computer communicatively coupled to a server computer included in a server  
system;

wherein said certified client operates said client computer to  
interactively use said transaction system.

95. The system of Claim 94,  
wherein said server system provides a market engine supporting a  
virtual trading floor involving said fungible, ephemeral commodities.

96. The system of Claim 95,  
wherein said server system further comprises an engine system  
supporting said virtual trading floor involving said fungible, ephemeral  
commodities.

97. A transaction system supporting transactions involving at least one  
fungible, ephemeral commodity, comprising:

a computer communicatively coupled to a certified client, and  
accessibly coupled to a computer memory, and controlled by a program  
system comprised of program steps residing in said memory of:

said certified client initiating at least one action in said transaction system; and is further comprised of at least two members of the basic usage program collection comprising program steps of:

managing at least one user resource;

managing a bilateral trading portfolio comprising at least one bilateral trade in at least one of said fungible, ephemeral commodities;

managing a market position portfolio comprising market positions of at least one of said fungible, ephemeral commodities;

managing a market trading collection comprising at least one market trade in at least one of said fungible, ephemeral commodities;

managing a credit resource collection comprising at least one credit resource; and

managing compliance reporting based upon at least one member of the collection comprising said user resources, said market position portfolio, said bilateral trading portfolio and said market trading collection.

98. The system of Claim 97,

wherein the program step of said certified client initiating said action in said transaction system is further comprised of at least one member of the collection comprising the program steps of:

initiating a bid for a market interval at a bid price and a bid amount as a first validated order;

initiating an ask for a market interval at a ask price and a ask amount as a second validated order;

responding to a financial commitment presented by said transaction system to create a financial response to said financial commitment;

reporting at least one of said bilateral trades to said transaction system;  
and

confirming at least one of said bilateral trades to said transaction system;

wherein said market interval includes a product type associated with at least one of said fungible, ephemeral commodities for at least one location for at least one time interval.

99. The system of Claim 98,

wherein the program step of said certified client responding to said financial commitment is further comprised of at least one member of the collection comprising the program steps of

creating a financial payment of said financial commitment in said transaction system; and

creating a financial counter-response to said financial commitment in said transaction system.

100. The system of Claim 98,

wherein the program step of managing said user resource further comprises at least one member of the collection comprising the program steps of:

managing a generator of at least one of said fungible, ephemeral commodities;

managing a load consuming at least one of said fungible, ephemeral commodities;

managing a transmission facility for at least one of said fungible, ephemeral commodities;

managing an import providing at least one of said fungible, ephemeral commodities; and

managing an export consuming at least one of said fungible, ephemeral commodities.

101. The system of Claim 100,

wherein the program step managing said user resource is further comprised of the program step of:

creating a first knowledge interval of said ephemeral, fungible commodity at a first time interval containing a first cost in said knowledge interval collection; and further comprised of at least one member of the collection comprising the program steps of:

maintaining a bid interval collection of bid intervals of said ephemeral, fungible commodity, each comprised of a bid price, a bid amount, and a bid time interval; and

maintaining an ask interval collection of ask intervals of said ephemeral, fungible commodity, each comprised of a ask price, a ask amount, and a ask time interval;

wherein the program step creating said first knowledge interval is comprised of the program steps of:

receiving a knowledge interval creation message to create a received knowledge interval creation message; and

creating said first knowledge interval of said ephemeral, fungible commodity at said first time interval containing said first cost in said

knowledge interval collection based upon said received knowledge interval creation message.

102. The system of Claim 101,

wherein the program step managing said user resource is further comprised of the program steps of:

determining said ephemeral, fungible commodity needs over a planning time interval; and

determining an equipment usage plan based upon said knowledge interval collection containing an equipment usage item of said user resource comprised of an activation time and an action belonging to an action collection comprising start-action, stop-action and throttle-action to create a resource operating schedule; and

operating said equipment usage item of said user resource based upon said device operating schedule.

103. The system of Claim 102,

wherein the program step managing said user resource is further comprised of the program step of:

examining an equipment usage collection comprised of equipment usage entries each containing a delivery time and a need schedule for said ephemeral, fungible commodity to create said ephemeral, fungible commodity needs over said planning time interval comprises an amount.

104. The system of Claim 103,



wherein said ephemeral, fungible commodity needs over said planning time interval further comprises a cost limit; and

wherein the program step initiating said bid is further comprised of the program step of:

making said bid of a first bid amount at a first bid price within said cost limit for said first time interval of said ephemeral, fungible commodity.

105. The system of Claim 102,

wherein the program step operating said equipment usage item based upon said device operating schedule is further comprised of at least one member of the collection comprising the program steps of

starting said equipment usage item of said user resource;

stopping said equipment usage item of said user resource; and

throttling said equipment usage item of said user resource.

106. The system of Claim 97,

wherein the program step of managing said market position portfolio is comprised of the program steps of:

maintaining a market window;

maintaining a local market position portfolio comprised of at least one market position summary, each of said market position summaries including a market interval of said fungible, ephemeral commodity within said market window;

presenting said local market position portfolio based upon said market window;

wherein the program step of presenting said local market position portfolio is further comprised of:

presenting at least one of said market position summaries including said market interval within said market window.

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107. The system of Claim 106,

wherein at least one of said market position summaries of said local market position portfolio is further comprised of an amount-held, a current bid summary, a current ask summary, a current market price and a current order summary;

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wherein the program step of presenting said market position summary further comprising the program steps of:

presenting said included market interval;

presenting said amount-held;

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presenting said current bid summary;

presenting said current ask summary;

presenting said current market price; and

presenting said current order summary.

20 108. The system of Claim 107,

wherein the program system is further comprised of the program step maintaining a market position database including the program step of:

maintaining at least one of said market positions containing at

least one of said market intervals further including at least one member

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of the collection comprising the program steps of:

maintaining an amount-held associated with said market interval;

maintaining a current bid list associated with said market interval including at least one current bid;

maintaining a current ask list associated with said market interval including at least one ask;

maintaining a current market price associated with said market interval; and

maintaining a current order list associated with said market interval.

109. The system of Claim 108,

wherein the program system is further comprised of the program step of:

establishing a client node belonging to said node collection of said AC power network as said business location; and

wherein the program step maintaining said local market position portfolio is further comprised of at least one member of a calculation collection comprising the program steps of:

calculating said current bid summary from said market position database based upon said business location;

calculating said current ask summary from said market position database based upon said business location; and

calculating said current market price from said market position database based upon said business location.

110. The system of Claim 109,

wherein at least one of said market intervals contains an AC power transfer product type as said fungible, ephemeral commodity and contains said location as a first of said nodes directed to a second of said nodes of said AC power network node collection.

111. The system of Claim 110,

wherein the program system is further comprised of the program step of:

maintaining a flowgate collection containing at least two flowgate entries;

wherein each of said flowgate entries contained in said flowgate collection includes a factor, a from-node of said node collection and a to-node of said node collection;

wherein for each of said flowgate entries contained in said flowgate collection, at least one of said market intervals contains said AC power transfer product type as said fungible, ephemeral commodity and said location coinciding with said flowgate entry; and

wherein at least one member of said calculation collection is further based upon said flowgate collection.

112. The system of Claim 111,

wherein said product type is further comprised of an AC power transfer point-to-point product type as said fungible, ephemeral commodity.

113. The system of Claim 112,

wherein the program step maintaining said current bid list is further comprised of the program steps of:

receiving a request for a point-to-point bid associated with said market interval to create a received point-to-point bid request;

generating a point-to-point bid associated with said market interval based upon said received bid request to create a new point-to-point bid associated with said market interval further including the steps of:

generating a bid associated with said market interval containing said AC power transfer product type and said location coinciding with said flowgate entry, for at least one flowgate entry contained in said flowgate collection; and

sending said new point-to-point bid associated with said market interval based upon said received bid request as an order message.

114. The system of Claim 106,

wherein said market trade is associated with at least one of said market intervals of said fungible, ephemeral commodity by said certified client with a member of the trade specification collection;

wherein said trade specification collection is comprised of

a bid specification containing an amount, and a price;

an ask specification containing said amount, and said price; and

an order specification containing said amount and said price;

wherein the program step managing said market trade collection is further comprised of the program step of

presenting said market trade, for at least one of said market trades,

further comprised of the program steps of

presenting said market interval;

identifying said member of said trade specification collection;  
presenting said amount; and  
presenting said price.

5 115. The system of Claim 97,

wherein the program step of managing said bilateral trading portfolio is  
further comprised of the program steps of:

managing said bilateral trade, for each of said bilateral trades of said  
bilateral trading portfolio.

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116. The system of Claim 97,

wherein the program step of managing said bilateral trading portfolio is  
further comprised of the program steps of:

receiving an authenticated bilateral trade notification message to create

15 a received bilateral trade notification message;

updating said bilateral trading portfolio based upon said received  
bilateral trade notification message;

generating an initial bilateral trade;

processing said initial bilateral trade to create an initial bilateral trade

20 message;

inserting said initial bilateral trade into said bilateral trading portfolio;

sending said initial bilateral trade message;

receiving a bilateral trade confirmation message to create a received  
bilateral trade confirmation request; and

25 inserting said received bilateral trade confirmation request into said  
bilateral trading portfolio.

117. The system of Claim 116,

wherein the program step of managing said bilateral trading portfolio is further comprised of the program steps of:

responding to said received bilateral trade confirmation request to create a bilateral trade confirmation response;

inserting said bilateral trade confirmation response into said bilateral trading portfolio;

processing said bilateral trade confirmation response to create a bilateral trade confirmation response message; and

sending said bilateral trade confirmation response message.

118. The system of Claim 97,

wherein the program step of managing said credit resource collection is comprised of the program steps of:

managing said credit resource, for each of said credit resources of said credit resource collection.

119. The system of Claim 118,

wherein the program step of managing said credit resource, for at least one of said credit resources of said credit resource collection, is further comprised of the program steps of:

receiving a credit resource message from said transaction system to create a received credit resource message;

updating said credit resource based upon said received credit resource message;

presenting said credit resource;  
preparing a credit resource request message; and  
sending said credit resource request message to create a sent credit  
request.

120. The system of Claim 119,

wherein the program step of receiving said credit resource message is  
further comprised of the program step of:

receiving a credit request response message from said transaction  
system based upon said sent credit request to create a received credit  
request response.

121. The system of Claim 97,

wherein the program step of managing said user resource, is further  
comprised of the program steps of:

receiving a user resource schedule including a time interval from said  
transaction system to create a received schedule for said time interval;

updating an operating schedule for said user resource based upon said  
received schedule for said time interval to create said operating schedule  
containing an operating schedule entry for said time interval;

maintaining a real-time; and

controlling said user resource based upon said operating schedule for  
said user resource and based upon said real-time.

122. The system of Claim 121,



wherein said operating schedule entry for said time interval contained in said operating schedule for said user resource includes a capacity option item; and

wherein the program step of managing said user resource is further comprised of the program steps of:

sending a capacity option exercise message for said time interval based said capacity option item to create a sent capacity option exercise; and

updating said operating schedule entry for said time interval based upon said sent capacity option exercise.

123. The system of Claim 122,

wherein the program step of managing said user resource is further comprised of the program steps of:

receiving a capacity exercise acknowledgment based upon said sent capacity option exercise to create a received capacity exercise acknowledgment; and

updating said operating schedule entry for said time interval based upon said received capacity exercise acknowledgment.

124. The system of Claim 123,

wherein said sent capacity option exercise includes an exercise amount;

wherein said received capacity exercise acknowledgment includes an acknowledgment amount;

wherein the program step of managing said user resource is further comprised of the program steps of:

determining if said exercise amount is greater than said acknowledgment amount; and

reporting a shortfall of said exercise amount minus said acknowledgment amount whenever said exercise amount is greater than said acknowledgment amount.

125. The system of Claim 97,

wherein said program system supports said certified client acoustically communicating with said computer to interactively use said transaction system.

126. The system of Claim 97, further comprising

a client computer communicatively coupled to a server computer included in a server system;

wherein said certified client operates said client computer to interactively use said transaction system.

127. The system of Claim 126,

wherein said server system provides a market engine supporting a virtual trading floor involving said fungible, ephemeral commodities.

128. The system of Claim 127,

wherein said server system further comprises an engine system supporting said virtual trading floor involving said fungible, ephemeral commodities.

129. A method for a certified client interactively using a transaction system supporting transactions involving at least one fungible, ephemeral commodity, comprising the step of:

said certified client initiating at least one action in said transaction system;

and further comprising at least two members of the basic usage collection comprising the steps of:

managing at least one user resource;

managing a bilateral trading portfolio comprising at least one bilateral trade in at least one of said fungible, ephemeral commodities;

managing a market position portfolio comprising at least one market position of at least one of said fungible, ephemeral commodities;

managing a market trading collection comprising at least one market trade in at least one of said fungible, ephemeral commodities;

managing a credit resource collection comprising at least one credit resource; and

managing compliance reporting based upon at least one member of the collection comprising said user resources, said market position portfolio, said bilateral trading portfolio and said market trading collection.

130. The method of Claim 129,

wherein the step of said certified client initiating said action in said transaction system is further comprised of at least one member of the collection comprising the steps of:

initiating a bid for a market interval at a bid price and a bid amount as a first validated order;

initiating an ask for a market interval at a ask price and a ask amount  
as a second validated order;

responding to a financial commitment presented by said transaction  
system to create a financial response to said financial commitment;

5 reporting at least one of said bilateral trades to said transaction system;  
and

confirming at least one of said bilateral trades to said transaction  
system;

wherein said market interval includes a product type associated with at  
10 least one of said fungible, ephemeral commodities for at least one location for  
at least one time interval.

131. The method of Claim 130,

wherein the step of managing said user resource further comprises at  
15 least one member of the collection comprising the steps of:

managing a generator of at least one of said fungible, ephemeral  
commodities;

managing a load consuming at least one of said fungible, ephemeral  
commodities;

20 managing a transmission facility for at least one of said fungible,  
ephemeral commodities;

managing an import providing at least one of said fungible, ephemeral  
commodities; and

managing an export consuming at least one of said fungible,  
25 ephemeral commodities.

132. The method of Claim 131,

wherein the step managing said user resource is further comprised of the step of:

creating a first knowledge interval of said ephemeral, fungible commodity at a first time interval containing a first cost in said knowledge interval collection;

wherein the step managing said user resource is further comprised of at least one member of the collection comprising the steps of:

maintaining a bid interval collection of bid intervals of said ephemeral, fungible commodity, each comprised of a bid price, a bid amount, and a bid time interval; and

maintaining an ask interval collection of ask intervals of said ephemeral, fungible commodity, each comprised of a ask price, a ask amount, and a ask time interval;

wherein the step creating said first knowledge interval is comprised of the steps of:

receiving a knowledge interval creation message to create a received knowledge interval creation message; and

creating said first knowledge interval of said ephemeral, fungible commodity at said first time interval containing said first cost in said knowledge interval collection based upon said received knowledge interval creation message.

133. The method of Claim 132,

wherein the step managing said user resource is further comprised of the steps of:

determining said ephemeral, fungible commodity needs over a planning time interval; and

determining an equipment usage plan based upon said knowledge interval collection containing an equipment usage item of said user resource comprised of an activation time and an action belonging to an action collection comprising start-action, stop-action and throttle-action to create a resource operating schedule; and

operating said equipment usage item of said user resource based upon said device operating schedule.

134. The method of Claim 133,

wherein the step managing said user resource is further comprised of the step of:

examining an equipment usage collection comprised of equipment usage entries each containing a delivery time and a need schedule for said ephemeral, fungible commodity to create said ephemeral, fungible commodity needs over said planning time interval comprises an amount.

135. The method of Claim 134,

wherein said ephemeral, fungible commodity needs over said planning time interval further comprises a cost limit; and

wherein the step said certified client initiating said bid is further comprised of the step of:

making said bid of a first bid amount at a first bid price within said cost limit for said first time interval of said ephemeral, fungible commodity.

136. The method of Claim 133,

wherein the step operating said equipment usage item based upon said device operating schedule is further comprised of at least one member of the collection comprising the steps of

starting said equipment usage item of said user resource;

stopping said equipment usage item of said user resource; and

throttling said equipment usage item of said user resource.

137. The method of Claim 130,

wherein the step of responding to said financial commitment presented by said transaction system is further comprised of at least one member of the collection comprising the steps of

creating a financial payment of said financial commitment in said transaction system; and

creating a financial counter-response to said financial commitment in said transaction system.

138. The method of Claim 137,

wherein said financial commitment in said transaction system is further comprised of a first financial obligation to a first party;

wherein the step of said certified client responding to said financial commitment is further comprised of the step of

said certified client responding to said first financial obligation to said first party to create a first financial payment to said first party.

139. The first financial payment to said first party as a product of the process of Claim 138.

140. The method of Claim 129,

5 wherein the step of managing said market position portfolio is comprised of the steps of:

maintaining a market window;

maintaining a local market position portfolio comprised of at least one market position summary, each of said market position summaries including a  
10 market interval of said fungible, ephemeral commodity within said market window;

presenting said local market position portfolio based upon said market window;

wherein the step of presenting said local market position portfolio is  
15 further comprised of

presenting at least one of said market position summaries including said market interval within said market window.

141. The method of Claim 140,

20 wherein at least one of said market position summaries of said local market position portfolio is further comprised of an amount-held, a current bid summary, a current ask summary, a current market price and a current order summary;

wherein the step of presenting said market position summary further  
25 comprising the steps of

presenting said included market interval;



presenting said amount-held;  
presenting said current bid summary;  
presenting said current ask summary;  
presenting said current market price; and  
5 presenting said current order summary.

142. The method of Claim 141, further comprising the step of:

maintaining a market position database including the step of

maintaining at least one of said market positions containing at  
10 least one of said market intervals further including at least one member  
of the collection comprising the steps of

maintaining an amount-held associated with said market  
interval;

maintaining a current bid list associated with said market  
15 interval including at least one current bid;

maintaining a current ask list associated with said market  
interval including at least one ask;

maintaining a current market price associated with said  
market interval; and

20 maintaining a current order list associated with said  
market interval.

143. The method of Claim 142, further comprised of the step of:

establishing a client node belonging to said node collection of said AC

25 power network as said business location; and

wherein the step maintaining said local market position portfolio is further comprised of at least one member of a calculation collection comprising the steps of:

calculating said current bid summary from said market position database based upon said business location;

calculating said current ask summary from said market position database based upon said business location; and

calculating said current market price from said market position database based upon said business location.

144. The method of Claim 143,

wherein at least one of said market intervals contains an AC power transfer product type as said fungible, ephemeral commodity and contains said location as a first of said nodes directed to a second of said nodes of said AC power network node collection.

145. The method of Claim 144, further comprised of the step of:

maintaining a flowgate collection containing at least two flowgate entries;

wherein each of said flowgate entries contained in said flowgate collection includes a factor, a from-node of said node collection and a to-node of said node collection;

wherein for each of said flowgate entries contained in said flowgate collection, at least one of said market intervals contains said AC power transfer product type as said fungible, ephemeral commodity and said location coinciding with said flowgate entry; and

wherein at least one member of said calculation collection is further based upon said flowgate collection.

146. The method of Claim 145,

wherein said product type is further comprised of an AC power transfer point-to-point product type as said fungible, ephemeral commodity.

147. The method of Claim 146,

wherein the step maintaining said current bid list is further comprised of the steps of:

receiving a request for a point-to-point bid associated with said market interval to create a received point-to-point bid request;

generating a point-to-point bid associated with said market interval based upon said received bid request to create a new point-to-point bid associated with said market interval further including the steps of:

generating a bid associated with said market interval containing said AC power transfer product type and said location coinciding with said flowgate entry, for at least one flowgate entry contained in said flowgate collection; and

sending said new point-to-point bid associated with said market interval based upon said received bid request as an order message.

148. The method of Claim 140,

wherein said market trade is associated with at least one of said market intervals of said fungible, ephemeral commodity by said certified client with a member of the trade specification collection;

wherein said trade specification collection is comprised of

a bid specification containing an amount, and a price;  
an ask specification containing said amount, and said price; and  
an order specification containing said amount and said price;  
wherein the step managing said market trade collection is further

5 comprised of the step of

presenting said market trade, for at least one of said market trades,  
further comprised of the steps of

presenting said market interval;  
identifying said member of said trade specification collection;  
10 presenting said amount; and  
presenting said price.

149. The method of Claim 129,

wherein the step of managing said bilateral trading portfolio is further  
15 comprised of the steps of:  
managing said bilateral trade, for each of said bilateral trades of said  
bilateral trading portfolio.

150. The method of Claim 129,

20 wherein the step of managing said bilateral trading portfolio is further  
comprised of the steps of:

receiving an authenticated bilateral trade notification message to create  
a received bilateral trade notification message;  
updating said bilateral trading portfolio based upon said received  
25 bilateral trade notification message;  
generating an initial bilateral trade;

processing said initial bilateral trade to create an initial bilateral trade message;

inserting said initial bilateral trade into said bilateral trading portfolio;

sending said initial bilateral trade message;

5 receiving a bilateral trade confirmation message to create a received bilateral trade confirmation request; and

inserting said received bilateral trade confirmation request into said bilateral trading portfolio.

10 151. The method of Claim 150,

wherein the step of managing said bilateral trading portfolio is further comprised of the steps of:

responding to said received bilateral trade confirmation request to create a bilateral trade confirmation response;

15 inserting said bilateral trade confirmation response into said bilateral trading portfolio;

processing said bilateral trade confirmation response to create a bilateral trade confirmation response message; and

sending said bilateral trade confirmation response message.

20 152. The method of Claim 129,

wherein the step of managing said credit resource collection is comprised of the steps of:

managing said credit resource, for each of said credit resources of said  
25 credit resource collection.

153. The method of Claim 152,

wherein the step of managing said credit resource, for at least one of said credit resources of said credit resource collection, is further comprised of the steps of:

receiving a credit resource message to create a received credit resource message;

updating said credit resource based upon said received credit resource message;

presenting said credit resource;

preparing a credit resource request message; and

sending said credit resource request message to create a sent credit request.

154. The method of Claim 153,

wherein the step of receiving said credit resource message is further comprised of the step of:

receiving a credit request response message based upon said sent credit request to create a received credit request response.

155. The method of Claim 129,

wherein the step of managing said user resource, is further comprised of the steps of:

receiving a user resource schedule including a time interval to create a received schedule for said time interval;

updating an operating schedule for said user resource based upon said received schedule for said time interval to create said operating schedule containing an operating schedule entry for said time interval;

maintaining a real-time; and

controlling said user resource based upon said operating schedule for said user resource and based upon said real-time.

156. The method of Claim 155,

wherein said operating schedule entry for said time interval contained in said operating schedule for said user resource includes a capacity option item; and

wherein the step of managing said user resource is further comprised of the steps of:

sending a capacity option exercise message for said time interval based said capacity option item to create a sent capacity option exercise; and

updating said operating schedule entry for said time interval based upon said sent capacity option exercise.

157. The method of Claim 156,

wherein the step of managing said user resource is further comprised of the steps of:

receiving a capacity exercise acknowledgment based upon said sent capacity option exercise to create a received capacity exercise acknowledgment; and

updating said operating schedule entry for said time interval based upon said received capacity exercise acknowledgment.

158. The method of Claim 157,

wherein said sent capacity option exercise includes an exercise amount;

wherein said received capacity exercise acknowledgment includes an acknowledgment amount;

wherein the step of managing said user resource is further comprised of the steps of:

determining if said exercise amount is greater than said acknowledgment amount; and

reporting a shortfall of said exercise amount minus said acknowledgment amount whenever said exercise amount is greater than said acknowledgment amount.

159. The method of Claim 129,

wherein said certified client acoustically communicates with said transaction system to interactively use said transaction system.

160. The method of Claim 129,

wherein said transaction system is comprised of a client computer communicatively coupled to a server computer included in a server system;

wherein said certified client operates said client computer to interactively use said transaction system.

161. The method of Claim 160,



wherein said server system provides a market engine supporting a virtual trading floor involving at least one of said fungible, ephemeral commodities.

162. The method of Claim 161,

wherein said server system further comprises an engine system supporting said virtual trading floor involving said fungible, ephemeral commodities.

163. The method of Claim 160,

wherein said client computer is controlled by a program system containing program steps residing in a memory accessibly coupled to said client computer;

wherein said program system is comprised of at least two members each implementing a member of said basic usage collection.

164. A transaction system for supporting transactions involving at least one fungible, ephemeral commodity, comprising:

a means for using said transaction system communicatively coupled to

a certified client further comprising:

a means for said certified client initiating at least one action in said transaction system; and further comprised of at least two members of the basic usage means collection comprising of:

a means for managing at least one user resource;

a means for managing a bilateral trading portfolio comprising at least one bilateral trade in at least one of said fungible, ephemeral commodities;

a means for managing a market position portfolio comprising market positions of at least one of said fungible, ephemeral commodities;

a means for managing a market trading collection comprising at least one market trade in at least one of said fungible, ephemeral commodities;

5 a means for managing a credit resource collection comprising at least one credit resource; and

a means for managing compliance reporting based upon at least one member of the collection comprising said user resources, said market position portfolio, said bilateral trading portfolio and said market trading collection.

10 165. The system of Claim 164,

wherein said means for said certified client initiating said action in said transaction system is further comprised of at least one member of the collection comprising:

15 a means for initiating a bid for a market interval at a bid price and a bid amount as a first validated order;

a means for initiating an ask for a market interval at a ask price and a ask amount as a second validated order;

20 a means for responding to a financial commitment presented by said transaction system to create a financial response to said financial commitment;

a means for reporting at least one of said bilateral trades to said transaction system; and

25 a means for confirming at least one of said bilateral trades to said transaction system;

wherein said market interval includes a product type associated with at least one of said fungible, ephemeral commodities for at least one location for at least one time interval.

166. The system of Claim 165,

wherein said means for responding to said financial commitment presented by said transaction system is further comprised of at least one member of the collection comprising

a means for creating a financial payment of said financial commitment in said transaction system; and

a means for creating a financial counter-response to said financial commitment in said transaction system.

167. The system of Claim 164,

wherein said means for managing said user resource further comprises at least one member of the collection comprising:

a means for managing a generator of at least one of said fungible, ephemeral commodities;

a means for managing a load consuming at least one of said fungible, ephemeral commodities;

a means for managing a transmission facility for at least one of said fungible, ephemeral commodities;

a means for managing an import providing at least one of said fungible, ephemeral commodities; and

a means for managing an export consuming at least one of said fungible, ephemeral commodities.

168. The system of Claim 167,

wherein said means for managing said user resource is further comprised of:

a means for creating a first knowledge interval of said ephemeral, fungible commodity at a first time interval containing a first cost in said knowledge interval collection; and at least one member of the collection comprising:

a means for maintaining a bid interval collection of bid intervals of said ephemeral, fungible commodity, each comprised of a bid price, a bid amount, and a bid time interval; and

a means for maintaining an ask interval collection of ask intervals of said ephemeral, fungible commodity, each comprised of a ask price, a ask amount, and a ask time interval;

wherein said means for creating said first knowledge interval is comprised of:

a means for receiving a knowledge interval creation message to create a received knowledge interval creation message; and

a means for creating said first knowledge interval of said ephemeral, fungible commodity at said first time interval containing said first cost in said knowledge interval collection based upon said received knowledge interval creation message.

169. The system of Claim 168,

wherein said means for managing said user resource is further comprised of:

a means for determining said ephemeral, fungible commodity needs over a planning time interval; and

a means for determining an equipment usage plan based upon said knowledge interval collection containing an equipment usage item of said user resource comprised of an activation time and an action belonging to an action collection comprising start-action, stop-action and throttle-action to create a resource operating schedule; and

a means for operating said equipment usage item of said user resource based upon said device operating schedule.

170. The system of Claim of 169,

wherein said means for managing said user resource is further comprised of:

a means for examining an equipment usage collection comprised of equipment usage entries each containing a delivery time and a need schedule for said ephemeral, fungible commodity to create said ephemeral, fungible commodity needs over said planning time interval comprises an amount.

171. The system of Claim of 170,

wherein said ephemeral, fungible commodity needs over said planning time interval further comprises a cost limit; and

wherein said means for said certified client initiating said bid is further comprised of:

a means for making said bid of a first bid amount at a first bid price within said cost limit for said first time interval of said ephemeral, fungible commodity.

172. The system of Claim 169,

wherein said means for operating said equipment usage item based upon said device operating schedule is further comprised of at least one member of the collection comprising

a means for starting said equipment usage item of said user resource;

a means for stopping said equipment usage item of said user resource;

and

a means for throttling said equipment usage item of said user resource.

173. The system of Claim 164,

wherein said means for managing said market position portfolio is comprised of:

a means for maintaining a market window;

a means for maintaining a local market position portfolio comprised of at least one market position summary, each of said market position summaries including a market interval of said fungible, ephemeral commodity within said market window;

a means for presenting said local market position portfolio based upon said market window;

wherein said means for presenting said local market position portfolio is further comprised of:

a means for presenting at least one of said market position summaries including said market interval within said market window.

174. The system of Claim 173,

wherein at least one of said market position summaries of said local market position portfolio is further comprised of an amount-held, a current bid summary, a current ask summary, a current market price and a current order summary;

wherein said means for presenting said market position summary further comprising:

a means for presenting said included market interval;

a means for presenting said amount-held;

a means for presenting said current bid summary;

a means for presenting said current ask summary;

a means for presenting said current market price; and

a means for presenting said current order summary.

175. The system of Claim 174, further comprising:

a means for maintaining a market position database including:

a means for maintaining at least one of said market positions containing at least one of said market intervals further including at least one member of the collection comprising:

a means for maintaining an amount-held associated with said market interval;

a means for maintaining a current bid list associated with said market interval including at least one current bid;

a means for maintaining a current ask list associated with said market interval including at least one ask;

a means for maintaining a current market price associated with said market interval; and

a means for maintaining a current order list associated with said market interval.

176. The system of Claim 175, further comprising:

a means for establishing a client node belonging to said node collection of said AC power network as said business location; and

wherein said means for maintaining said local market position portfolio is further comprised of at least one member of a calculation collection comprising:

a means for calculating said current bid summary from said market position database based upon said business location;

a means for calculating said current ask summary from said market position database based upon said business location; and

a means for calculating said current market price from said market position database based upon said business location.

177. The system of Claim 176,

wherein at least one of said market intervals contains an AC power transfer product type as said fungible, ephemeral commodity and contains said location as a first of said nodes directed to a second of said nodes of said AC power network node collection.

178. The system of Claim 177, further comprising:

a means for maintaining a flowgate collection containing at least two flowgate entries;



wherein each of said flowgate entries contained in said flowgate collection includes a factor, a from-node of said node collection and a to-node of said node collection;

wherein for each of said flowgate entries contained in said flowgate collection, at least one of said market intervals contains said AC power transfer product type as said fungible, ephemeral commodity and said location coinciding with said flowgate entry; and

wherein at least one member of said calculation collection is further based upon said flowgate collection.

179. The system of Claim 178,

wherein said product type is further comprised of an AC power transfer point-to-point product type as said fungible, ephemeral commodity.

180. The system of Claim 179,

wherein said means for maintaining said current bid list is further comprised of:

a means for receiving a request for a point-to-point bid associated with said market interval to create a received point-to-point bid request;

a means for generating a point-to-point bid associated with said market interval based upon said received bid request to create a new point-to-point bid associated with said market interval further including:

a means for generating a bid associated with said market interval containing said AC power transfer product type and said location coinciding with said flowgate entry, for at least one flowgate entry contained in said flowgate collection; and

a means for sending said new point-to-point bid associated with said market interval based upon said received bid request as an order message.

181. The system of Claim 173,

wherein said market trade is associated with at least one of said market intervals of said fungible, ephemeral commodity by said certified client with a member of the trade specification collection;

wherein said trade specification collection is comprised of

a bid specification containing an amount, and a price;

an ask specification containing said amount, and said price; and

an order specification containing said amount and said price;

wherein said means for managing said market trade collection is further comprised of

a means for presenting said market trade, for at least one of said market trades, further comprised of

a means for presenting said market interval;

a means for identifying said member of said trade specification collection;

a means for presenting said amount; and

a means for presenting said price.

182. The system of Claim 164,

wherein said means for managing said bilateral trading portfolio is further comprising:

a means for managing said bilateral trade, for at least one flowgate entry contained in said flowgate collection.

183. The system of Claim 164,

wherein said means for managing said bilateral trading portfolio is further comprised of:

a means for receiving an authenticated bilateral trade notification message to create a received bilateral trade notification message; and

a means for updating said bilateral trading portfolio based upon said received bilateral trade notification message;

a means for generating an initial bilateral trade;

a means for processing said initial bilateral trade to create an initial bilateral trade message;

a means for inserting said initial bilateral trade into said bilateral trading portfolio; and

a means for sending said initial bilateral trade message;

a means for receiving a bilateral trade confirmation message to create a received bilateral trade confirmation request; and

a means for inserting said received bilateral trade confirmation request into said bilateral trading portfolio.

184. The system of Claim 183,

wherein said means for managing said bilateral trading portfolio is further comprised of:

a means for responding to said received bilateral trade confirmation request to create a bilateral trade confirmation response;

a means for inserting said bilateral trade confirmation response into said bilateral trading portfolio;

a means for processing said bilateral trade confirmation response to create a bilateral trade confirmation response message; and

a means for sending said bilateral trade confirmation response message.

185. The system of Claim 164,

wherein said means for managing said credit resource collection is comprised of:

a means for managing said credit resource, for each of said credit resources of said credit resource collection.

186. The system of Claim 185,

wherein said means for managing said credit resource, for at least one of said credit resources of said credit resource collection, is further comprised of:

a means for receiving a credit resource message from said transaction system to create a received credit resource message;

a means for updating said credit resource based upon said received credit resource message;

a means for presenting said credit resource;

a means for preparing a credit resource request message; and

a means for sending said credit resource request message to create a sent credit request.

187. The system of Claim 186,

wherein said means for receiving said credit resource message is further comprised of:

a means for receiving a credit request response message from said transaction system based upon said sent credit request to create a received credit request response.

188. The system of Claim 164,

wherein said means for managing said user resource, is further comprised of:

a means for receiving a user resource schedule including a time interval from said transaction system to create a received schedule for said time interval;

a means for updating an operating schedule for said user resource based upon said received schedule for said time interval to create said operating schedule containing an operating schedule entry for said time interval;

a means for maintaining a real-time; and

a means for controlling said user resource based upon said operating schedule for said user resource and based upon said real-time.

189. The system of Claim 188,

wherein said operating schedule entry for said time interval contained in said operating schedule for said user resource includes a capacity option item; and

wherein said means for managing said user resource is further comprised of:

a means for sending a capacity option exercise message for said time interval based said capacity option item to create a sent capacity option exercise; and

a means for updating said operating schedule entry for said time interval based upon said sent capacity option exercise.

190. The system of Claim 189,

wherein said means for managing said user resource is further comprised of:

a means for receiving a capacity exercise acknowledgment based upon said sent capacity option exercise to create a received capacity exercise acknowledgment; and

a means for updating said operating schedule entry for said time interval based upon said received capacity exercise acknowledgment.

191. The system of Claim 190,

wherein said sent capacity option exercise includes an exercise amount;

wherein said received capacity exercise acknowledgment includes an acknowledgment amount;

wherein said means for managing said user resource is further comprised of:

a means for determining if said exercise amount is greater than said acknowledgment amount; and

a means for reporting a shortfall of said exercise amount minus said acknowledgment amount whenever said exercise amount is greater than said acknowledgment amount.

5 192. The system of Claim 164,

wherein said means for using said transaction system supports at least one member of the collection comprising:

said certified client acoustically communicating with said transaction system to interactively use said transaction system;

10 said certified client communicating in a tactile fashion with said transaction system to interactively use said transaction system;

said certified client communicating in a wireless fashion with said transaction system to interactively use said transaction system; and

15 said certified client communicating in a wireline fashion with said transaction system to interactively use said transaction system.

193. The system of Claim 164,

20 wherein said transaction system is further comprised of at least one computer operated by said certified client and controlled by a program system comprised of program steps residing in a memory accessibly coupled to said computer.

194. The system of Claim 193,

25 wherein said means for using said transaction system is implemented as at least one of said program steps in said program system.

195. The system of Claim 193,

wherein at least one member of said basic usage means collection is implemented as at least one of said program steps in said program system.

5 196. The system of Claim 193,

wherein said means for said certified client initiating said action is implemented as at least one of said program steps in said program system.

197. The system of Claim 164,

10 wherein said transaction system is further comprised of a client computer communicatively coupled to a server computer included in a server system;

wherein said certified client operates said client computer to interactively use said transaction system.

15

198. The system of Claim 197,

wherein said server system provides a market engine supporting a virtual trading floor involving said fungible, ephemeral commodities.

20 199. The system of Claim 198,

wherein said server system further comprises an engine system supporting said virtual trading floor involving said fungible, ephemeral commodities.